

***Amendments to the Claims***

The listing of claims will replace all prior versions, and listings of claims in the application.

1. (cancelled)
2. (cancelled)
3. (cancelled)
4. (cancelled)
5. (cancelled)
6. (previously presented) A system for providing gateway services in a voice communication system over a packet-switched network, comprising:
  - an application layer that includes application services;
  - a platform for sessions and modules, wherein said application layer includes a gateway server and a common service; and
  - a routing manager that manages usage on the gateway server, wherein the routing manager comprises:
    - maintaining means for maintaining a list of routes;
    - managing means for managing connections to the routing servers on the network;
    - exporting means for exporting local routes to routing servers;
    - importing means for importing disseminated routes from routing servers;
    - receiving means for receiving a request for a route;
    - obtaining means for obtaining static global and dynamic routes from routing servers;

caching means for caching said static global and said dynamic routes for future use;

finding means for finding matching routes for a specific telephone number; and

prioritizing means for prioritizing matching routes.

7. (original) A system of claim 6, wherein said application layer also includes an autoforward service.
8. (original) A system of claim 7, wherein said platform includes a session manager that creates and manages sessions.
9. (original) A system of claim 8, wherein said session manager includes a rule engine.
10. (original) A system of claim 8, wherein said session corresponds to a voice call.
11. (previously presented) A system of claim 8, further comprising:
  - a line group manager that coordinates communication between a telephone line side and a packet-switched network side of the gateway server;
  - a database access manager that monitors access to the database server;
  - a media manager that manages voice prompt usage; and
  - a call rating manager that determines the costs to apply to each call.
12. (previously presented) A system of claim 8, further comprising:
  - a parsing subsystem coupled to said routing manager.
13. (original) A system of claim 12, wherein said parsing subsystem comprises:
  - maintaining means for maintaining a parsing table;
  - receiving means for receiving call information;
  - determining means for determining a country code;

retrieving means for retrieving pattern data from said parsing table;  
determining means for determining an area code;  
determining means for determining a local number;  
determining means for determining an extension; and  
outputting means for outputting a call address.

14. (previously presented) A system of claim 8, further comprising:  
a dynamic cache subsystem coupled to said routing manager.
15. (original) A system of claim 12, wherein said parsing subsystem matches routes by wildcarding.
16. (original) A system of claim 11, further comprising:  
a conversion module.
17. (original) A system of claim 11, further comprising:  
a hardware device manager module that coordinates telephony and network components.
18. (cancelled)
19. (previously presented) A system of claim 8, further comprising:  
connecting means for connecting to routing servers; and  
managing means for managing connections to routing servers.
20. (cancelled)
21. (cancelled)
22. (cancelled)
23. (cancelled)

24. (cancelled)

25. (previously presented) A system for routing server, comprising:

first receiving means for receiving exported local routes from gateway servers, wherein said first receiving means for receiving exported local routes includes:

requesting means for requesting exportable local routes from gateway servers;

receiving means for receiving said exportable local routes from gateway servers;

transforming means for transforming said exportable local routes into dynamic routes on the routing server;

storing means for storing said dynamic routes; and

updating means for updating said dynamic routes.;

transforming means for transforming exported local routes into dynamic routes;

first storing means for storing said dynamic routes;

second storing means for storing static global and disseminated routes;

first providing means for providing said disseminated routes to gateway servers;

second receiving means for receiving requests for matching routes from gateway servers;

determining means for determining a matching route; and

second providing means for providing said matching route.

26. (cancelled)

27. (original) A system of claim 25, wherein said means for transforming an exported local route comprises:

receiving means for receiving exported local routes;

first checking means for checking a route address entry;

second checking means for checking route timing information;  
third checking means for checking a route access entry;  
fourth checking means for checking route ordering information;  
first adding means for adding a route identity;  
second adding means for adding of exporting gateway server; and  
third adding means for adding a temporal stamp to said exported local route.

28. (original) A system of claim 25, wherein said means for disseminated routing comprise:

first providing means for providing routes to a routing server;  
querying means for querying the routing server for said routes configured for dissemination; and  
second providing means for providing matching routes to a gateway server.

29. (original) A system of claim 25, wherein said means for dynamic routing, comprise:

connecting means for connecting to a routing server;  
querying means for querying a routing server;  
providing means for providing matching routes to a gateway server;  
and  
matching means for storing said matching routes on a gateway server.

30. (original) A system of claim 25, wherein said means for static global routing, comprise:

connecting means for connecting to a routing server;  
querying means for querying a routing server; and  
providing means for providing matching routes to a gateway server.

31. (cancelled)

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39. (cancelled)
40. (previously presented) A method of providing gateway services in a voice communication system over a packet-switched network, comprising the steps of:
  - instantiating application services within an application layer;
  - providing a software object platform for sessions and modules, wherein said application layer includes a gateway service and a common service; and
  - managing route usage on the gateway server with a routing manager, wherein managing route usage includes:
    - maintaining means for maintaining a list of routes;
    - managing connections to the routing servers on the network;
    - exporting local routes to routing servers;
    - importing disseminated routes from routing servers;
    - receiving a request for a route;
    - obtaining static global and dynamic routes from routing servers;
    - caching said static global and said dynamic routes for future use;

finding matching routes for a specific telephone number; and  
prioritizing matching routes.

41. (original) A method of claim 40, wherein said application layer also includes an autoforward service.
42. (original) A method of claim 41, wherein said platform includes a session manager that creates and manages sessions.
43. (original) A method of claim 42, wherein said session manager includes a rule engine.
44. (original) A method of claim 42, wherein said session corresponds to a voice call.
45. (cancelled)
46. (previously presented) A method of claim 40, further comprising the steps of:  
maintaining a parsing subsystem coupled to said routing manager.
47. (original) A method of claim 46, wherein said parsing subsystem comprises the steps of:  
maintaining a parsing table;  
receiving call information;  
determining a country code;  
retrieving pattern data from said parsing table;  
determining an area code;  
determining a local number;  
determining an extension; and  
outputting a call address.
48. (previously presented) A method of claim 40, further comprising the steps of:

maintaining a dynamic cache subsystem coupled to said routing manager.

49. (original) A method of claim 46, wherein said parsing subsystem matches routes by wildcarding.
50. (previously presented) A method of claim 40, further comprising the steps of: connecting a conversion module.
51. (previously presented) A method of claim 40, further comprising the steps of: coordinating telephony and network components with a hardware device manager module.
52. (cancelled)
53. (previously presented) A method of claim 40, further comprising the steps of: connecting to routing servers; and managing connections to routing servers.
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74. (currently amended) A computer program product comprising a tangible computer readable medium having computer program logic recorded thereon for providing gateway services in a voice communication system over a packet-switched network, comprising:
  - means for enabling a computer to instantiate application services within an application layer;
  - means for enabling a computer to provide a software object platform for sessions and modules, wherein said application layer includes a gateway service and a common service; and

means for enabling a computer to manage route usage on the gateway server with a routing manager, wherein the routing manager includes;

means for enabling a computer to maintain means for maintaining a list of routes;

means for enabling a computer to manage means for managing connections to the routing servers on the network;

means for enabling a computer to export means for exporting local routes to routing servers;

means for enabling a computer to import means for importing disseminated routes from routing servers;

means for enabling a computer to receive means for receiving a request for a route;

means for enabling a computer to obtain means for obtaining static global and dynamic routes from routing servers;

means for enabling a computer to cache means for caching said static global and said dynamic routes for future use;

means for enabling a computer to find means for finding matching routes for a specific telephone number; and

means for enabling a computer to prioritize means for prioritizing matching routes.

75. (original) A computer program product of claim 74, wherein said application layer also includes an autoforward service.
76. (original) A computer program product of claim 75, wherein said platform includes a session manager that creates and manages sessions.
77. (original) A computer program product of claim 76, wherein said session manager includes a rule engine.

78. (original) A computer program product of claim 76, wherein said session corresponds to a voice call.

79. (previously presented) A computer program product of claim 76, further comprising:

means for enabling a computer to coordinate communication between a telephone line side and a packet-switched network side of the gateway server with a line group manager;

means for enabling a computer to monitor access to the database server with a database access manager;

means for enabling a computer to manage voice prompt usage with a media manager; and

means for enabling a computer to determine the costs to apply to each call with a call rating manager.

80. (original) A computer program product of claim 79, further comprising:

means for enabling a computer to maintain a parsing subsystem coupled to said routing manager.

81. (original) A computer program product of claim 80, wherein said parsing subsystem comprises:

means for enabling a computer to maintain means for maintaining a parsing table;

means for enabling a computer to receive means for receiving call information;

means for enabling a computer to determine means for determining a country code;

means for enabling a computer to retrieve means for retrieving pattern data from said parsing table;

means for enabling a computer to determine means for determining an area code;

means for enabling a computer to determine means for determining a local number;

means for enabling a computer to determine means for determining an extension; and

means for enabling a computer to output means for outputting a call address.

82. (original) A computer program product of claim 79, further comprising:  
means for enabling a computer to maintain a dynamic cache subsystem coupled to said routing manager.

83. (original) A computer program product of claim 80, wherein said parsing subsystem matches routes by wildcarding.

84. (original) A computer program product of claim 79, further comprising:  
means for enabling a computer to connect a conversion module.

85. (original) A computer program product of claim 79, further comprising:  
means for enabling a computer to coordinate telephony and network components with a hardware device manager module.

86. (cancelled)

87. (previously presented) A computer program product of claim 74, further comprising:  
means for enabling a computer to connect means for connecting to routing servers; and  
means for enabling a computer to manage means for managing connections to routing servers.

88. (cancelled)

89. (cancelled)

90. (currently amended) A computer program product comprising a tangible computer readable medium having computer program logic recorded thereon ~~of a~~ for providing routing server services comprising:

means for enabling a computer to serve routes with a routing application layer;

means for enabling a computer to provide a common object platform for memory and modules, wherein said routing application layer includes a route translation service;

means for enabling a computer to request exportable local routes from gateway servers;

means for enabling a computer to receive said exportable local routes from gateway servers;

means for enabling a computer to transform said exportable local routes into dynamic routes on the routing server;

means for enabling a computer to store said dynamic routes; and

means for enabling a computer to update said dynamic routes.

91. (original) A computer program product of claim 90, further comprising:

means for enabling a computer to maintain a parsing subsystem coupled to the routing server.

92. (original) A computer program product of claim 91, wherein said parsing subsystem comprises:

means for enabling a computer to maintain a parsing table;

means for enabling a computer to receive call information;

means for enabling a computer to determine a country code;

means for enabling a computer to retrieve pattern data from said parsing table;

means for enabling a computer to determine an area code;

means for enabling a computer to determine a local number;

means for enabling a computer to determine an extension; and

means for enabling a computer to output a call address.

93. (previously presented) A computer program product of routing server of claim 90, comprising:

means for enabling a computer to receive exported local routes from gateway servers;

means for enabling a computer to transform exported local routes into dynamic routes;

means for enabling a computer to store said dynamic routes;

means for enabling a computer to store static global and disseminated routes;

means for enabling a computer to provide said disseminated routes to gateway servers;

means for enabling a computer to receive requests for matching routes from gateway servers;

means for enabling a computer to determine a matching route; and

second providing means for provide said matching route.

94. (cancelled)

95. (original) A computer program product of claim 93, wherein said means for transforming an exported local route comprises:

means for enabling a computer to receive exported local routes;

means for enabling a computer to check a route address entry;

means for enabling a computer to check route timing information;

means for enabling a computer to check a route access entry;

means for enabling a computer to check route ordering information;  
means for enabling a computer to add a route identity;  
means for enabling a computer to add of exporting gateway server; and  
means for enabling a computer to add a temporal stamp to said  
exported local route.

96. (original) A computer program product of claim 93, wherein said means for disseminated routing comprise:
  - means for enabling a computer to provide routes to a routing server;
  - means for enabling a computer to query the routing server for said routes configured for dissemination; and
  - means for enabling a computer to provide matching routes to a gateway server.
97. (original) A computer program product of claim 93, wherein said means for dynamic routing, comprise:
  - means for enabling a computer to connect to a routing server;
  - means for enabling a computer to query a routing server;
  - means for enabling a computer to provide matching routes to a gateway server; and
  - means for enabling a computer to store said matching routes on a gateway server.
98. (original) A computer program product of claim 93, wherein said means for static global routing, comprise:
  - means for enabling a computer to connect to a routing server;
  - means for enabling a computer to query a routing server; and
  - means for enabling a computer to provide matching routes to a gateway server.
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